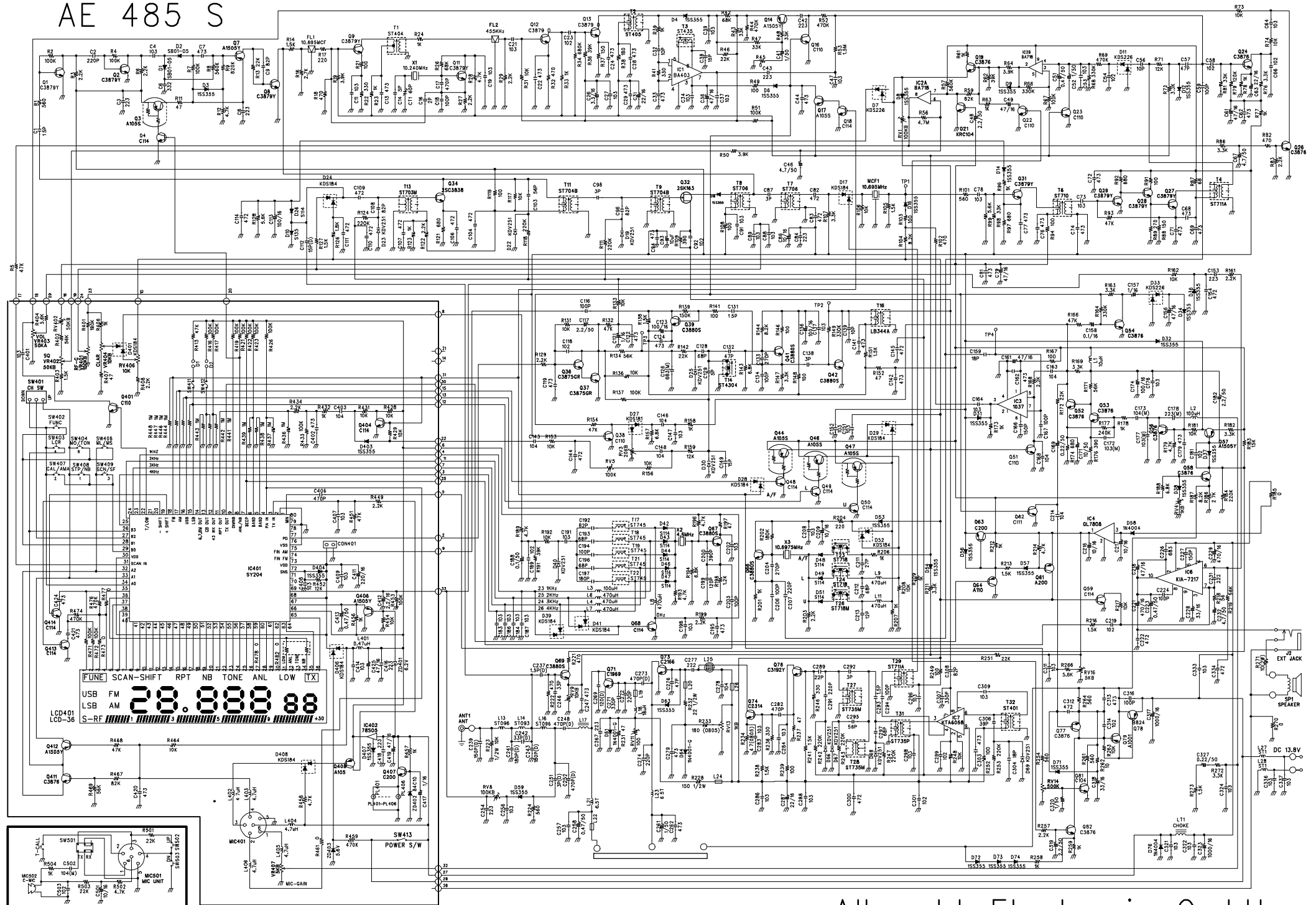
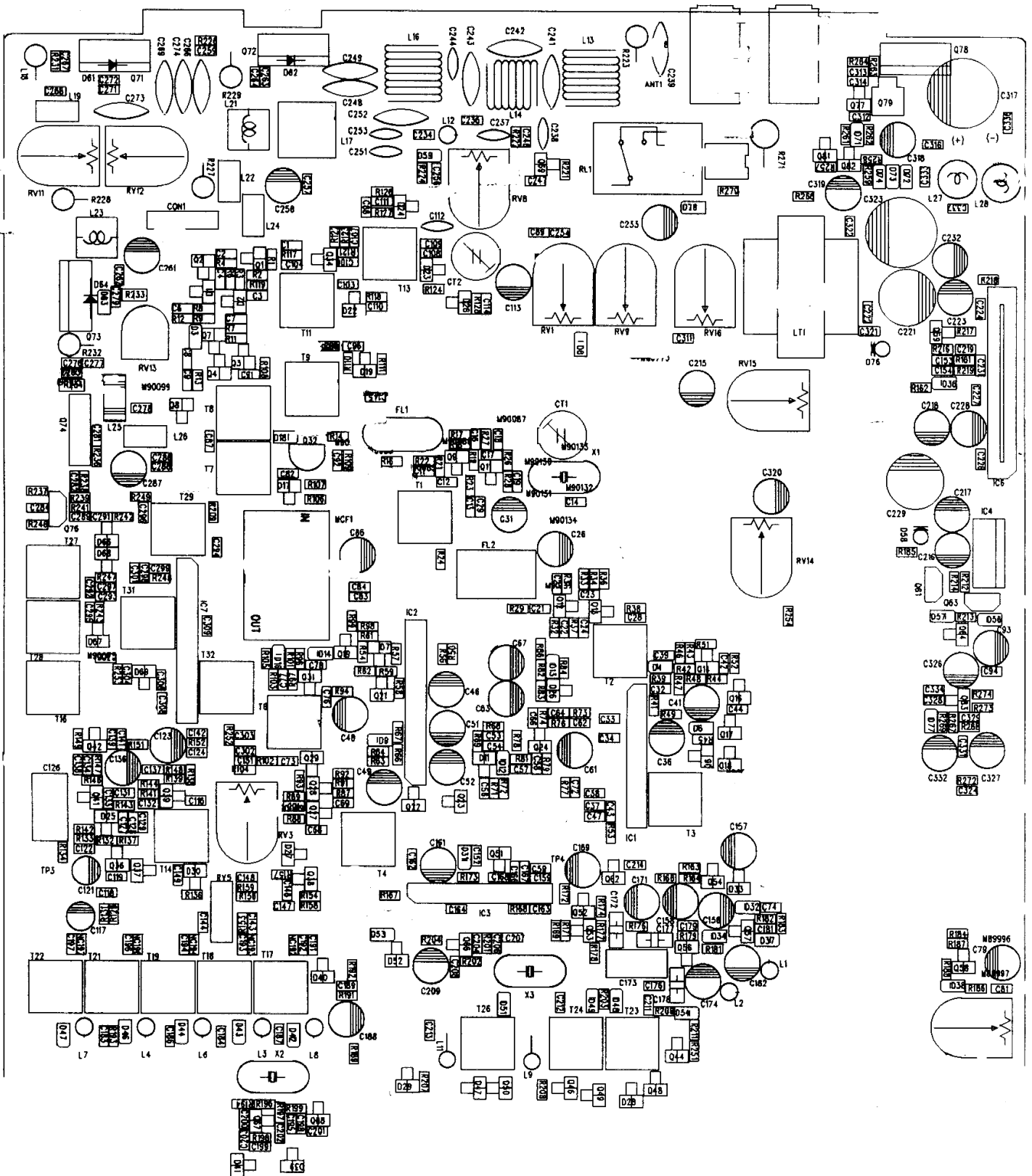


# AE 485 S



Albrecht Electronic GmbH

AE 485 S Main Board - Hauptplatine



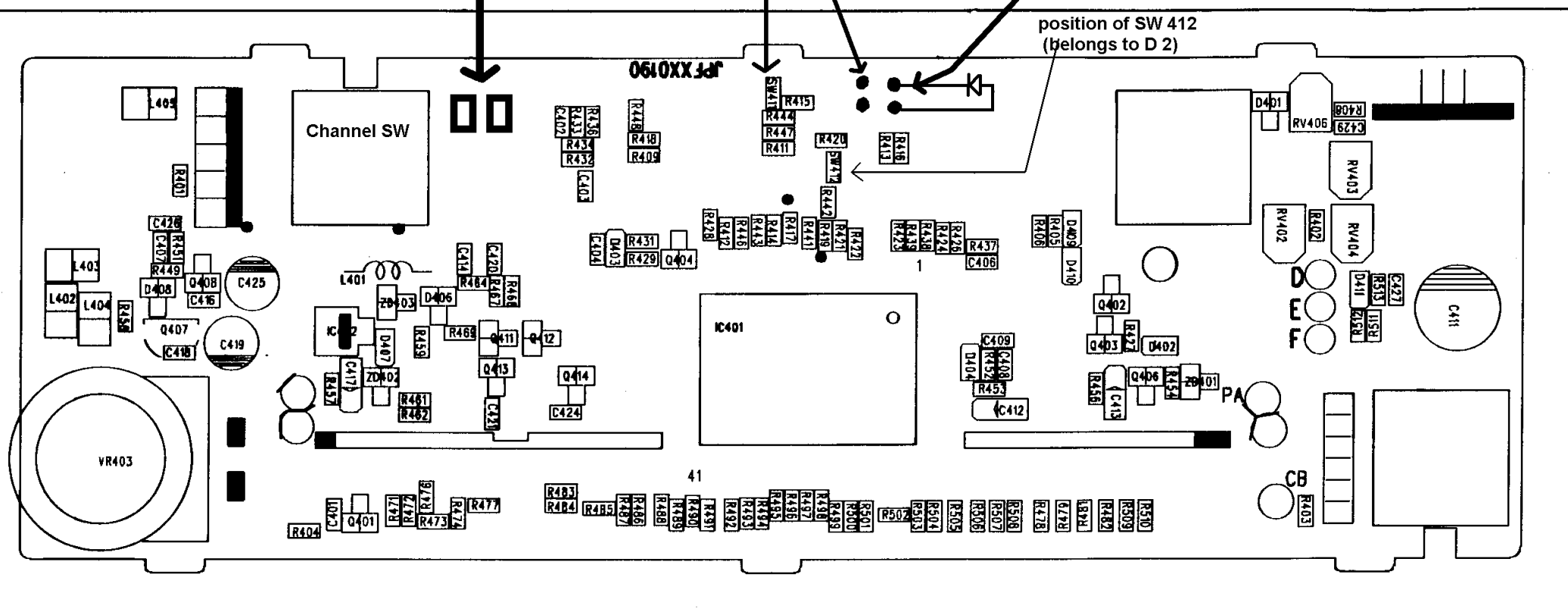
# **AE 485 S** **Jumpers and** **Programming Points**

Reset  
Contact Fields

Position for D 1 and  
SW 411 (countries with  
CB-Band only)

Position of D 2 (Germany and countries  
where extension allowed)  
(factory installed)

position of SW 412  
(belongs to D 2)



## AE 5800 (and others) Conversion Board / Programmierplatine

MODE	CON1	CON2	CON3	CON4	REMARKS / Bemerkungen
Only/Nur 10m	yes/ ja	-	-	-	Step FUNC enable /ein
10m + 454 CH	-	yes/ ja	-	-	Amateurband-Start/ step FUNC enable (ein)
Only/ Nur 454 CH	-	-	yes/ ja	-	Step FUNC enable/ ein
Only/Nur 40 CH	-	-	-	yes / ja	Step FUNC disable/ aus

### REMARKS / Bemerkungen (soldering connections valid for AE5800, may be different for others):

Green / grün: default setting AE 5800 for CB / entspricht Lieferzustand AE 5800 für CB Funk

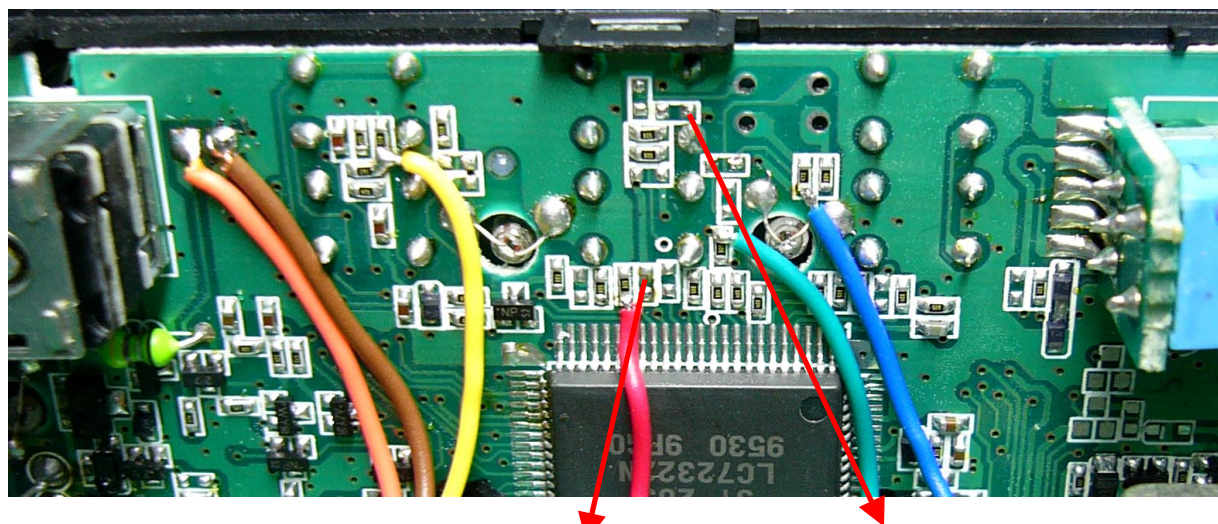
Red / rot: default setting AE 485 S for Amateur Radio/ entspricht Lieferzustand AE 485 S

- open / offen (Brücke nicht vorhanden bzw. entfernt)

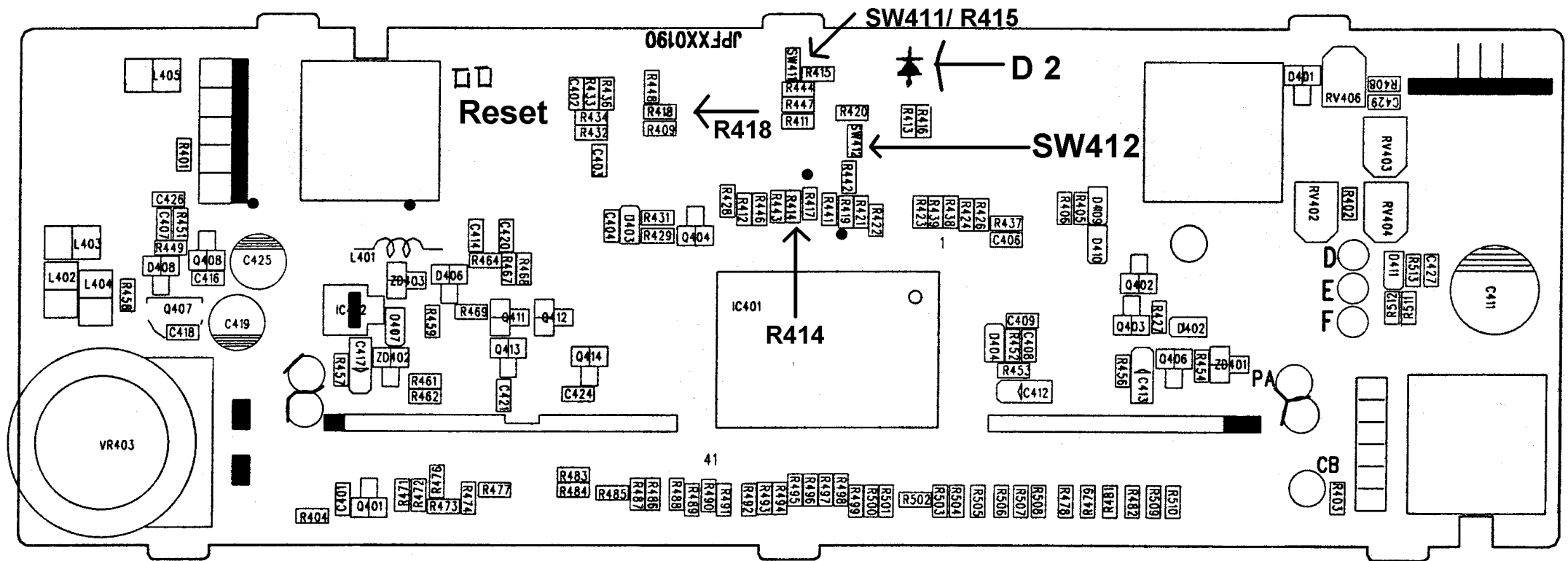
Yes/Ja: install mini jumper / Mini Steckbrücke eingesteckt

Positions CON1 - CON3 only for licensed amateur radio operators allowed / CON 1 bis CON 3 nur für lizenzierte Funkamateure im Rahmen ihrer Lizenzbestimmungen erlaubt-

CB Radio only with Position 4 allowed/ CB Funk nur in Programmierstellung CON4 gestattet



	. R414 = 10k	. R415 = 0 ohms
AE5800 without extension board/ ohne Programmierplatine	Installed / ist eingebaut	Installed/ ist eingebaut
AE5800 with extension board /mit eingebauter Programmierplatine	delete/ auslöten	delete /auslöten



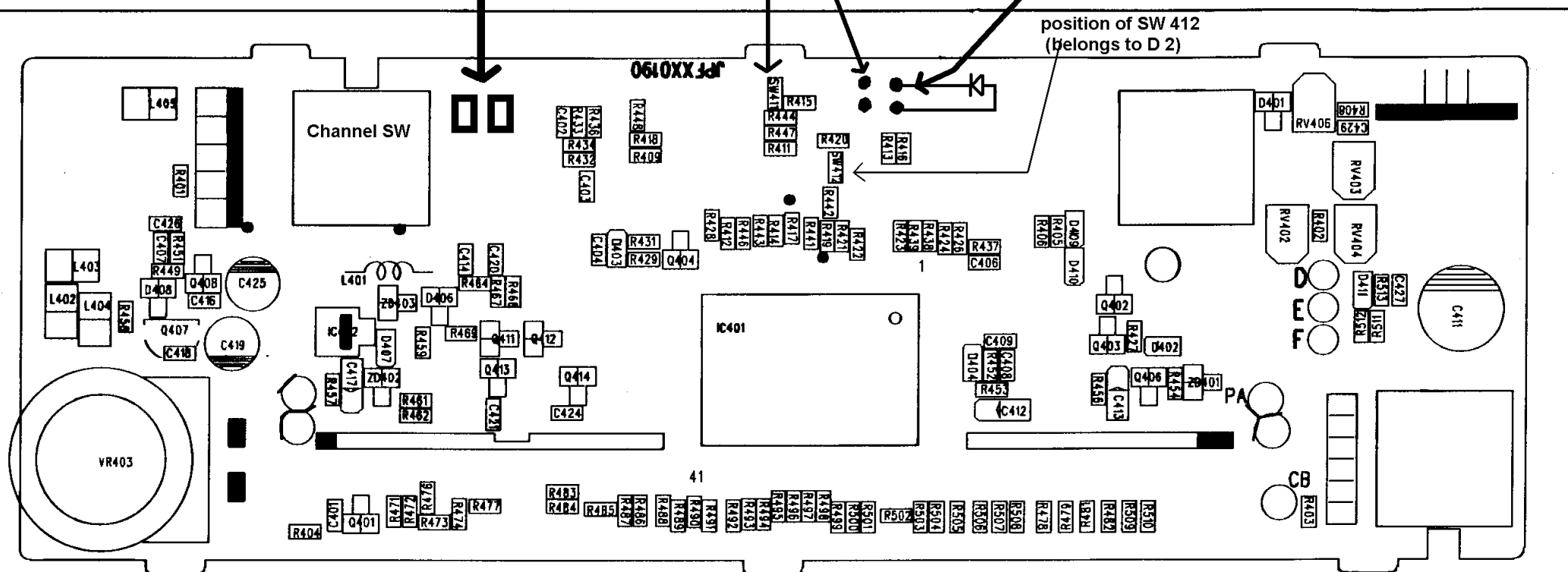
# **AE 485 S** **Jumpers and** **Programming Points**

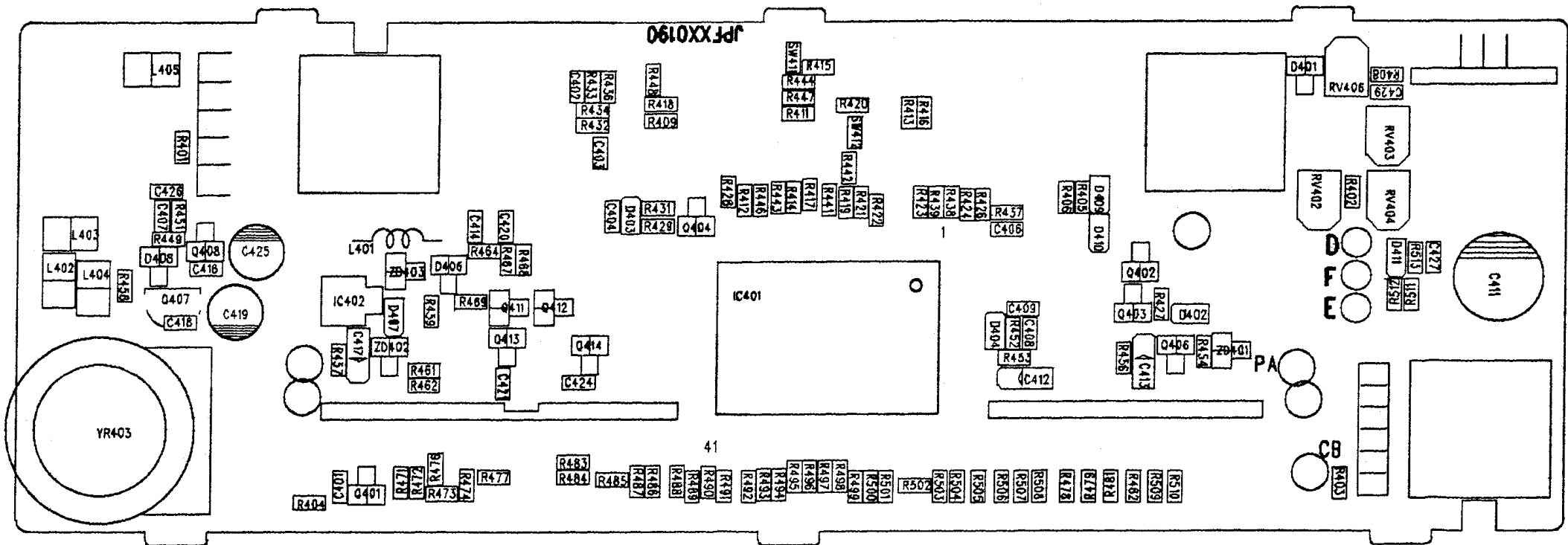
Reset  
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Position for D 1 and  
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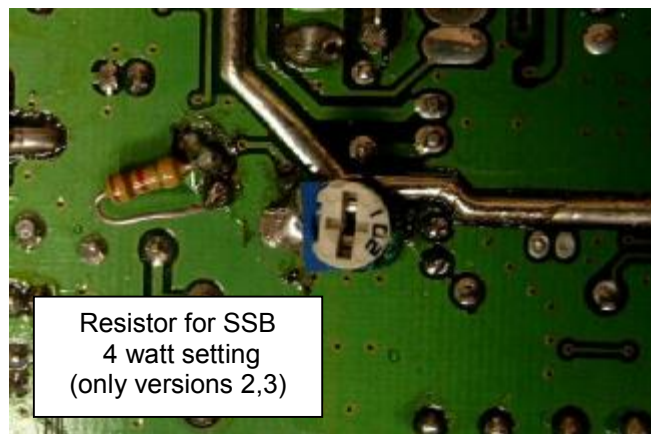
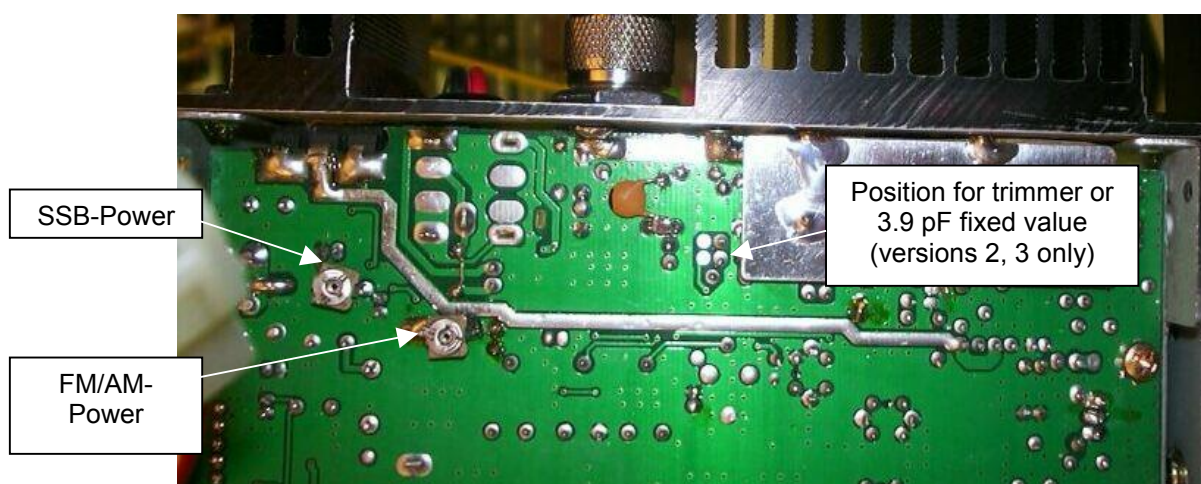
## Modification Hints AE 5800 / March 2003

### Increasing of Output Power for use by licenced radio amateurs

#### Problem:

AE 5800 has been shipped in up to now 3 slightly different versions, These versions have different output adjusting methods to keep the EN 300 433 limits in SSB (4 Watts PEP) , FM (4 Watts) and AM (1 Watt).

**Version 1 (see picture)** has 2 potentiometers on the soldering side.



The left potentiometer is for SSB only, the right for FM (AM is automatically set to 25 % of FM power) Both potentiometers are for output adjusting in the EN 300 433 version. The maximum tunable power value is around 10 watts.

**Version 2** has **only one potentiometer** (for FM), but a small additional **red coloured trimmer capacitor** for SSB in the position, which is free in version 1 (see above photo).

**Version 3** has one potentiometer for FM, a **fixed resistor** (1 kOhm, at the position where the SSB potentiometer was in version 1, see left photo), the small red trimmer or a fixed capacitor value 3.9 pF.

#### Output increasing:

If the tuning range of version 1 does not be enough, **delete both** potentiometers (version 1) or the FM potentiometer **and** the red trimmer capacitor (version2)

In version 3 please delete the 1 kOhms resistor, the FM potentiometer **and** the red trimmer or the fixed 3.9 pF capacitor.

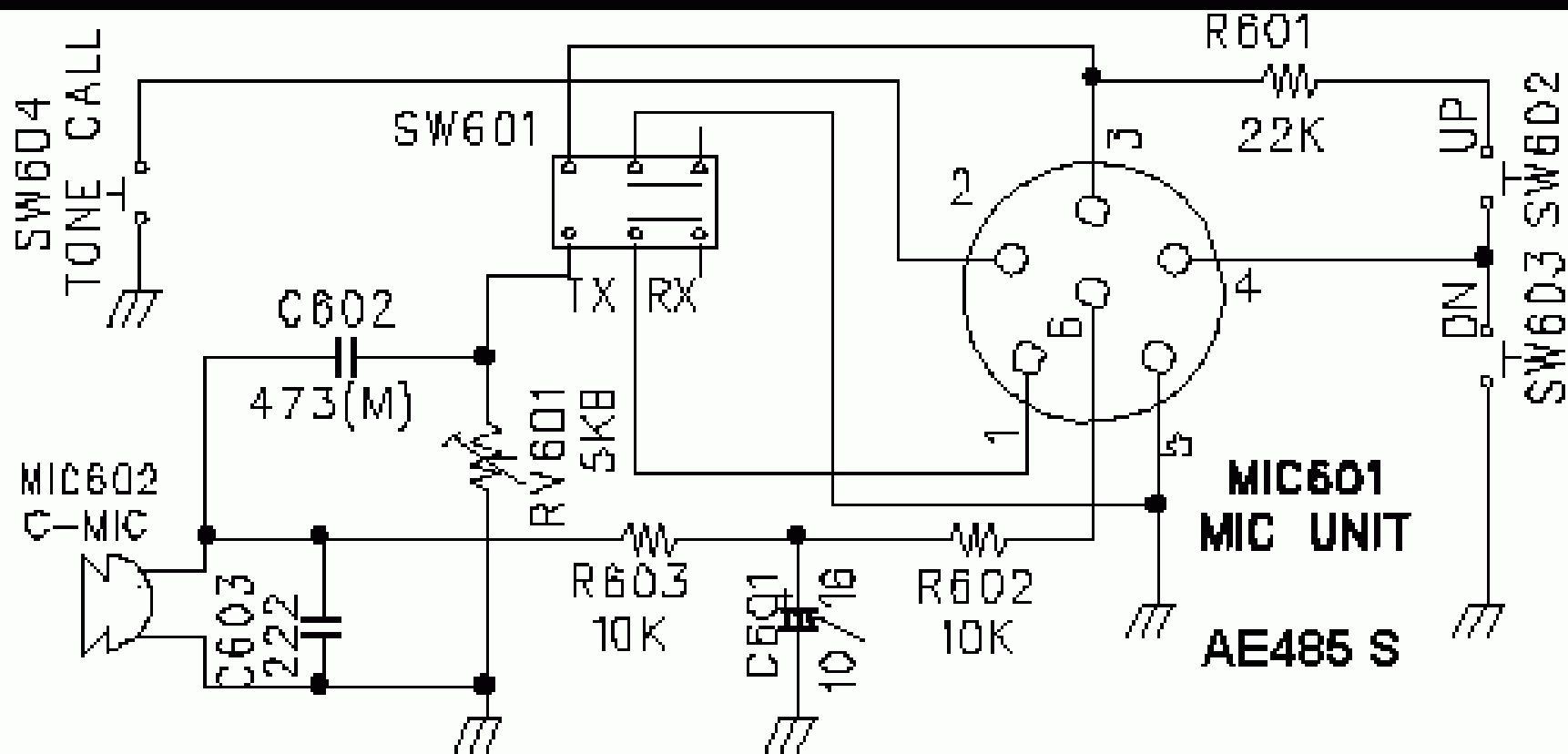
#### Final adjustment of SSB-ALC:

It may be necessary to re-adjust **RV 9** on the component side in SSB to obtain 25 Watts PEP with modulation.

#### Note:

This modifications are only allowed when converting the radio to amateur frequencies 28-29.7 MHz (see AE 485 S) and for use by licenced amateur radio operators. Increased power is forbidden in CB frequency range!







## user information for Albrecht 10 m transceivers

### Frequency extension to 5 Channel system

All our 10 m all mode transceivers AE 485 S, AE 497 S and AE 201S can be switched **temporarily** from frequency mode 28-29.7 MHz into channel mode. The list of frequencies and channels can be found on the next page.

After the conversion, the radio can be used from 25.15 MHz to 29.95 MHz. While Albrecht specifications are only valid for the amateur range starting with 28.000 MHz, Albrecht cannot guarantee correct operation on extended frequencies, especially on the lower channels. It may happen that the transceiver operate with less performance (output and sensitivity) or does even not lock in on all frequencies outside of the specified amateur radio range.

**Note:** Only authorized users are allowed to operate on these frequencies! Even if you should have a valid amateur radio operators licence it is not allowed to use channels or frequencies outside of the dedicated amateur radio band. The regulations may vary from country to country. Users are requested to fulfill all national user requirements for operating the radio.

#### Switching to 5 CHANNEL MOE:

##### AE 201 S:

Just press **FNCION** button, then press **CALL** and hold this key pressed for about 3 seconds. Release button and the unit works on 454 Channels until the radio will be later switched off again.

If you have once switched to 454 channels, you can also **toggle between channel number and frequency display** by pressing **FNCION CALL**, but this only by touching the call button for short time.

**AE 95 S and AE 9 S** same procedure, but here the correct buttons are the **FNCION** and the **2** buttons.

### Frequeny table for AE 497 S, AE 485 S and AE 201 S in activated channel mode

Channel number	Band A	B	C	D	E	F	G	H	I	J
1	25.165	25.615	26.065	26.515	26.965	27.415	27.865	28.315	28.765	29.215
2	25.175	25.625	26.075	26.525	26.975	27.425	27.875	28.325	28.775	29.225
3	25.185	25.635	26.085	26.535	26.985	27.435	27.885	28.335	28.785	29.235
3A	25.195	25.645	26.095	26.545	26.995	27.445	27.895	28.345	28.795	29.245
4	25.205	25.655	26.105	26.555	27.005	27.455	27.905	28.355	28.805	29.255
5	25.215	25.665	26.115	26.565	27.015	27.465	27.915	28.365	28.815	29.265
6	25.225	25.675	26.125	26.575	27.025	27.475	27.925	28.375	28.825	29.275
7	25.235	25.685	26.135	26.585	27.035	27.485	27.935	28.385	28.835	29.285
7A	25.245	25.695	26.145	26.595	27.045	27.495	27.945	28.395	28.845	29.295
8	25.255	25.705	26.155	26.605	27.055	27.505	27.955	28.405	28.855	29.305
9	25.265	25.715	26.165	26.615	27.065	27.515	27.965	28.415	28.865	29.315
10	25.275	25.725	26.175	26.625	27.075	27.525	27.975	28.425	28.875	29.325
11	25.285	25.735	26.185	26.635	27.085	27.535	27.985	28.435	28.885	29.335
11A	25.295	25.745	26.195	26.645	27.095	27.545	27.995	28.445	28.895	29.345
12	25.305	25.755	26.205	26.655	27.105	27.555	28.005	28.455	28.905	29.355
13	25.315	25.765	26.215	26.665	27.115	27.565	28.015	28.465	28.915	29.365
14	25.325	25.775	26.225	26.675	27.125	27.575	28.025	28.475	28.925	29.375
15	25.335	25.785	26.235	26.685	27.135	27.585	28.035	28.485	28.935	29.385
15A	25.345	25.795	26.245	26.695	27.145	27.595	28.045	28.495	28.945	29.395
16	25.355	25.805	26.255	26.705	27.155	27.605	28.055	28.505	28.955	29.405
17	25.365	25.815	26.265	26.715	27.165	27.615	28.065	28.515	28.965	29.415
18	25.375	25.825	26.275	26.725	27.175	27.625	28.075	28.525	28.975	29.425
19	25.385	25.835	26.285	26.735	27.185	27.635	28.085	28.535	28.985	29.435
19A	25.395	25.845	26.295	26.745	27.195	27.645	28.095	28.545	28.995	29.445
20	25.405	25.855	26.305	26.755	27.205	27.655	28.105	28.555	29.005	29.455
21	25.415	25.865	26.315	26.765	27.215	27.665	28.115	28.565	29.015	29.465
22	25.425	25.875	26.325	26.775	27.225	27.675	28.125	28.575	29.025	29.475
23	25.455	25.905	26.355	26.805	27.255	27.705	28.155	28.605	29.055	29.505
24	25.435	25.885	26.335	26.785	27.235	27.685	28.135	28.585	29.035	29.485
25	25.445	25.895	26.345	26.795	27.245	27.695	28.145	28.595	29.045	29.495
26	25.465	25.915	26.365	26.815	27.265	27.715	28.165	28.615	29.065	29.515
27	25.475	25.925	26.375	26.825	27.275	27.725	28.175	28.625	29.075	29.525
28	25.485	25.935	26.385	26.835	27.285	27.735	28.185	28.635	29.085	29.535
29	25.495	25.945	26.395	26.845	27.295	27.745	28.195	28.645	29.095	29.545
30	25.505	25.955	26.405	26.855	27.305	27.755	28.205	28.655	29.105	29.555
31	25.515	25.965	26.415	26.865	27.315	27.765	28.215	28.665	29.115	29.565
32	25.525	25.975	26.425	26.875	27.325	27.775	28.225	28.675	29.125	29.575
33	25.535	25.985	26.435	26.885	27.335	27.785	28.235	28.685	29.135	29.585
34	25.545	25.995	26.445	26.895	27.345	27.795	28.245	28.695	29.145	29.595
35	25.555	26.005	26.455	26.905	27.355	27.805	28.255	28.705	29.155	29.605
36	25.565	26.015	26.465	26.915	27.365	27.815	28.265	28.715	29.165	29.615
37	25.575	26.025	26.475	26.925	27.375	27.825	28.275	28.725	29.175	29.625
38	25.585	26.035	26.485	26.935	27.385	27.835	28.285	28.735	29.185	29.635
39	25.595	26.045	26.495	26.945	27.395	27.845	28.295	28.745	29.195	29.645
40	25.605	26.055	26.505	26.955	27.405	27.855	28.305	28.755	29.205	29.655
41										29.665
42										29.675
43										29.685
44										29.695

## Servicehinweis AE 485 S

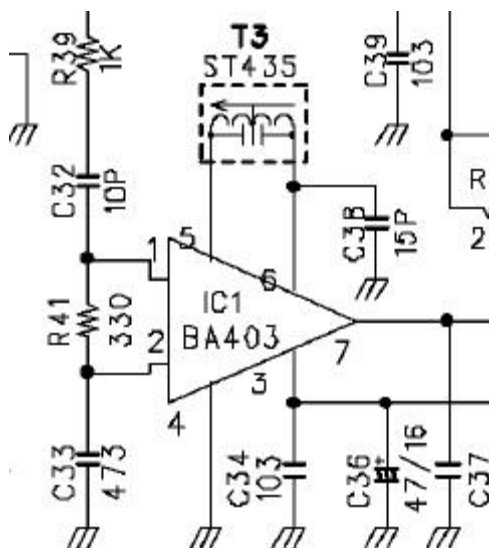
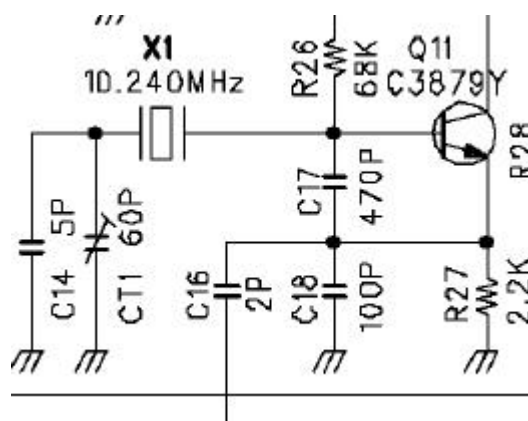
### Ungenaue FM Frequenzabstimmung bzw. Stabilität, Verzerrte FM-Wiedergabe

#### Problem:

Bei einigen erten aus den Anfangslieferungen treten in FM oft NF-erzerrungen im Empfang auf, besonders wenn die egenstation erhhten Frequenzhub benutzt. Manchmal treten die Effekte erst nach einigen Stunden Erwrmungsphase auf. In vielen Fllen wird der FM Empfang besser, wenn der Clarifier in einer der beiden Endstellungen steht. In diesem Fall ist wahrscheinlich die FM Platine nicht optimal eingestellt  
**Sehr oft wird allerdings auch vergessen, daß bei FM und AM der Clarifier ebenfalls betätigt werden kann! Normalerweise sollte der Regler in Mittelstellung stehen.**

#### Abhilfe:

Besonders kritisch ist die Abstimmung von T 3 (bei lteren erten, z.B. SS-485 ist das 203), der iscriminatorspule, evtl. auch noch beim 2. Mischer mit Trimmer CT 1. Sind Megerte vorhanden, dann kann man beide Abgleichpunkte vorsichtig gegeneinander mehrfach nachgestimmen, bis am autsprecherausgang ein SINA-Optimum erreicht ist. Mit einem mit 2 kHz Hub und 1 kHz modulierten Mesendersignal und einem SINA Meter kann man durch sorgfältiges Abstimmen von CT 1 und T 3 lirr faktoren bis unter 3 % entspr. 30 dB SINA (bewertet) erzielen. Bei 1.5 kHz Hub kann ein SINA-Wert von bis zu 40 dB im optimalen Fall erreicht werden.



Wenn keine Megerte vorhanden sind und wenn man wei, da die egenstation korrekt auf der Frequenz liegt, kann man ggf. auch T3 nach ehr oder mit dem Oszilloskop auf beste Sinusform bei mglichst hoher Ausgangsspannung einstellen. **Danach sollte man den Kern von T 3 aus der optimalen Stellung noch um ca. 45 Grad nach rechts (im Uhrzeigersinn) verdrehen, damit der Abgleich auch bei warmgelaufenem Gerät noch gut ist.**

**Kontrolle:** er Abgleich ist optimal, wenn die FM ualitt sich beim erstellen des Clarifiers nach beiden Endpunkten in etwa gleichermaen verschlechtert.

# AE-485 EXPANSION

FRONT PCB REF NO/VALUE	PRESENCE HAM/454 HAM START	40 CH ONLY	40 CH ONLY	40 CH ONLY	454 CH ONLY	454/HAM CB START	40/HAM CB START
SW 411 - 0ohm	X	0/X	0/X	0	X	X	0
R415 - 0ohm	X	0	X	0	X	X	0
SW 412 - 0ohm	X	0/X	0/X	0	0	X	X
D2 - 1N4148	0	0/X	0/X	0	0	X	X
R418 - 100Kohm	X	0/X	0/X ,	0	0	0	0
R 414 - 10Kohm	X	0	0	X	X	X	X
	step enable	step disable	step disable ch9+power on cb 454 and cb/ham enable	step enable	step enable	step enable	step enable
*454 CH - STEP FUNC ENABLE							

\* 0 - INSTALL      x - OPEN

# SPECIFICATIONS

## General

FREQUENCY RESOLUTION	: AM/FM/SSB ,10KHz STEP
FREQUENCY RANGE	: 26.965 - 27.405MHz
Semiconductors	: 74 Transistors, 70 Diodes, 8 ICs, 1 FET, 1 LCD.
Crystals	: 3
Microphone	: c-Mic Type
Speaker	: 8 ohm 2W
Antenna Connector	: M Type
Jacks & Connectors	: Mic(6P), EXT.SP(3.5 dia.), DC Power (2P)
Controls	: Channel Selector, Mode Switch (USB-AM-LSB-FM), MB Switch, Power ON/OFF-Volume Control, Clarifier, SQUELCH, Control, RF GAIN Control, MIC GAIN Control, SCAN Switch, LCR Switch, M-LOAD Switch, M-SAVE Switch, FUNC Switch, TONE-LOW Switch, Ch9 Switch, RF power volume.
Meter	: S/RF Power Meter (5 Dots LCD BAR)
Indicators	: Channel Frequency Indicator, TX Indicator, NB Indicator FUNC Indicator, USB, AM, LSB, FM Indicator SCAN Indicator, LOW Indicator,
Accessories	: Microphone, Hanger, Mounting Bracket, DC power cord with in-fuse

# MEASUREMENT CONDITIONS (90% Population)

Power Source	:	13.8V (DC)
Antenna Impedance	:	50 ohm
Test Temperature	:	77°F (25°C)
AM/FM Modulation Frequency	:	1kHz
SSB Modulation Frequency, Transmit	:	Two Tones : 500 Hz & 2400 Hz Single Tone : 1 kHz
Min Signal Input Level	:	1000uV
Reference Audio Output Power	:	0.5 W
Reference AM Modulation Percentahe	:	1 kHz 30%
Audio Frequency, SSB Receive	:	1 kHz
Audio Output Lode	:	8 ohm resistive



# TRANSMITTER SECTION

ITEMS		Unit	Nominal	Limit
Frequency Tolerance at 77°F (25°C)	AM	%	±0.0005	±0.003
(5 Minutes after switch on)	FM	%	±0.0005	±0.003
	SSB	%	±0.0005	±0.003
Carrier Power at No Modulation	AM	W	4	3.6-4.4
	FM	W PEP	4	3.6-4.4
PEP Power, Single Tones,	SSB	W PEP	4	3.6-4.4
Modulation Distortion at 1 kHz,				
50% Modulation	AM	%	3	8
1.2kHz DEVIATION	FM	%	3	8
Spurious Harmonic Suppression	AM	dBm	-54	-36
( 47-69MHz,      87-118MHz,	FM	dBm	-54	-36
174-230MHz,    470-862MHz. )	SSB	dBm	-54	-36
Carrier Suppression	SSB	dBm	-54	-36
Unwanted Sideband Suppression				
(at 2500 Hz 1W PEP 16 dB up)	SSB	dB	-55	-40
Current Drain at No Modulation	AM	mA	2000	2500
	FM	mA	3000	3500
	SSB	mA	3000	3500
Current Drain				
AM: Max Mod.		mA	2500	3500
FM: Max Mod.		mA	2500	3500
SSB: Max Watt PEP, Two Tones		mA	2500	3500
Modulation Frequency Response				
( 1 kHz, 0 dB Reference)				
Lower Frequency	AM	Hz	450	250-650
	FM	Hz	450	250-650
	SSB	Hz	450	250-650
Upper Frequency	AM	Hz	2500	1500-4000
	FM	Hz	2500	1500-4000
	SSB	Hz	3500	1500-5000
Carrier Power Uniformity, CH to CH				
at No Modulation	AM	W	0.5	1
	FM	W	0.5	1
Mic Input Level Uniformity, CH to				
CH for 4 watts Output 2.5 kHz				
Single Tone-SSB	SSB	dB	2	3
Mic Input Level Uniformity, LSB to				
USB for 10 watts Output, 1.5 kHz				
Single Tone		dB	1	3

ITEMS	Unit	Nominal	Limit
Microphone Sensitivity			
AM: For 50% Mod.	mV	1.5	6
FM: For 1kHz DEV.	mV	1.5	6
SSB: For 4W P.E.P.	mV	1.5	6
AMC Range			
AM: 50-100% Mod.	dB	50	40
FM: 1.5-2kHz DEV.	dB	50	40
SSB: 25-30 Watts PEP	dB	50	40
Modulation Capability AM	%	95	80-100
Modulation Attack Time	m Sec	20	25
Modulation Release Time	m Sec	250	100-500
RF Meter (S-9) Indication			
2.5 kHz Single Tone	SSB W	3.8	2.5-4

## RECEIVER SECTION

ITEMS		Unit	Nominal	Limit
(ANL & Noise Blanker Switch Off)				
Max sensitivity	AM	uV	0.5	1
	FM	uV	0.25	0.5
	SSB	uV	0.25	0.5
Sensitivity for 10 dB S/N	AM	uV	0.5	1
	FM	uV	0.25	0.16
	SSB	uV	0.25	0.16
AGC Figure of Merit 100mV for	AM	dB	90	80
10 dB Change in Audio Output	SSB	dB	90	80
Overload AGC Characteristics	AM	dB	±3	±6
from 100mV to 1000mV	SSB	dB	±3	±6
Overall Audio Fidelity at 6 dB Down				
Upper Frequency	AM	Hz	2000	1500-3000
	FM	Hz	2000	1500-3000
	SSB	Hz	3500	2500-5000
Lower Frequency	AM	Hz	400	300-600
	FM	Hz	400	300-600
	SSB	Hz	450	250-650
Cross Modulations, RS Standard	AM	dB	60	50
	FM	dB	60	50
Adjacent Channel Selectivity ±10 kHz	AM	dB	60	50
	FM	dB	60	50
	SSB	dB	70	60
Maximum Audio Output Power	AM	W	2.5	2
	FM	W	2.5	2
	SSB	W	2.5	2
Audio Output Power at 10% THD	AM	W	1.5	1
	FM	W	1.5	1
	SSB	W	1.5	1
THD at 500mW Audio Output				
AM: 1mV Input, 30%		%	3	10
80%		%	5	10
FM: 1mV Input, 1kHz DEV.		%	5	10
SSB: 1mV Input 1kHz Single Tone		%	3	10
RF Gain Control Range at Max	AM	dB	40	30-60
Sensitivity Level	FM	dB	40	30-60
	SSB	dB	40	30-60

ITEMS		Unit	Nominal	Limit
S/N Ratio at Input 1mV	AM	dB	40	34
	FM	dB	40	34
	SSB	dB	40	34
Squelch Sensitivity at Threshold	AM	uV	0.6	1.3
	FM	uV	0.6	1.3
	SSB	uV	0.6	1.3
Squelch Sensitivity at Tight	AM	uV	1000	320-3200
	FM	uV	1000	320-3200
	SSB	uV	1000	320-3200
Skirt Rejection ( $\pm 20$ kHz)	AM	dB	70	60
	FM	dB	70	60
	SSB	dB	70	60
S Meter Sensitivity at "S-9" (No Modulation AM)	AM	uV	100	30-320
	FM	uV	100	30-320
	SSB	uV	100	30-320
Image Rejection Ratio ( $f_o - 2 \times 10.695 \text{ MHz}/2$ )	AM	dB	76	66
	FM	dB	76	66
	SSB	dB	76	66
1/2 IF Rejection Ratio ( $f_o - 10.695 \text{ MHz}/2$ )	AM	dB	80	70
	FM	dB	80	70
	SSB	dB	80	70
SSB Adjacent Sideband Rejection	SSB	dB	60	40
IF Rejection Ratio 10.695 MHz	AM	dB	70	60
	FM	dB	70	60
	SSB	dB	70	60
Oscillator Dropout Voltage	AM	V	9	11
	FM	V	9	11
	SSB	V	9	11
Current Drain at No Signal	AM	mA	400	500
	FM	mA	400	500
	SSB	mA	400	500
Current Drain at Maximum Audio Output Power	AM	mA	600	1000
	FM	mA	600	1000
	SSB	mA	600	1000
Clarifier Range	AM	kHz	$\pm 1.5$	$\pm 0.8 - \pm 3.0$
	FM	kHz	$\pm 1.5$	$\pm 0.8 - \pm 3.0$
	SSB	kHz	$\pm 1.5$	$\pm 0.8 - \pm 3.0$
Spurious Rejection Ratio In Band	AM	dB	65	56
	FM	dB	65	56

ITEMS		Unit	Nominal	Limit
Out of Band	SSB	dB	65	56
	AM	dB	60	50
	FM	dB	60	50
NB Performance	SSB	dB	60	50
	AM	dB	30	20
	FM	dB	30	20
NB Loss	SSB	dB	25	16
	AM	dB	-4	-6
	FM	dB	-4	-6
Dynamic Range	SSB	dB	0	-6
	SSB	dB	65	60

## CHANNEL EXPANSION SS-485H.

1. DISCONNECT POWER LEAD FROM THE POWER SUPPLY.
2. CHANGE(MODIFICATION) CONNECTION AS PER THE ABOVE TABLE AND PCB DRAWING.
3. RESET : MAKE A SHORT CIRCUIT(CON4) BETWEEN RESET AND GROUND.
4. CONNECT POWER LEAD TO THE POWER SUPPLY AND THEN TURN ON, THEN HAM BAND OR CB BAND WILL BE DISPLAY.
5. PRESS "FUNC" SIMPLAY AND THEN PRESS "CALL" FOR MORE THAN 3SEC, THEN THE UNIT BECOME CB BAND OR HAM BAND.

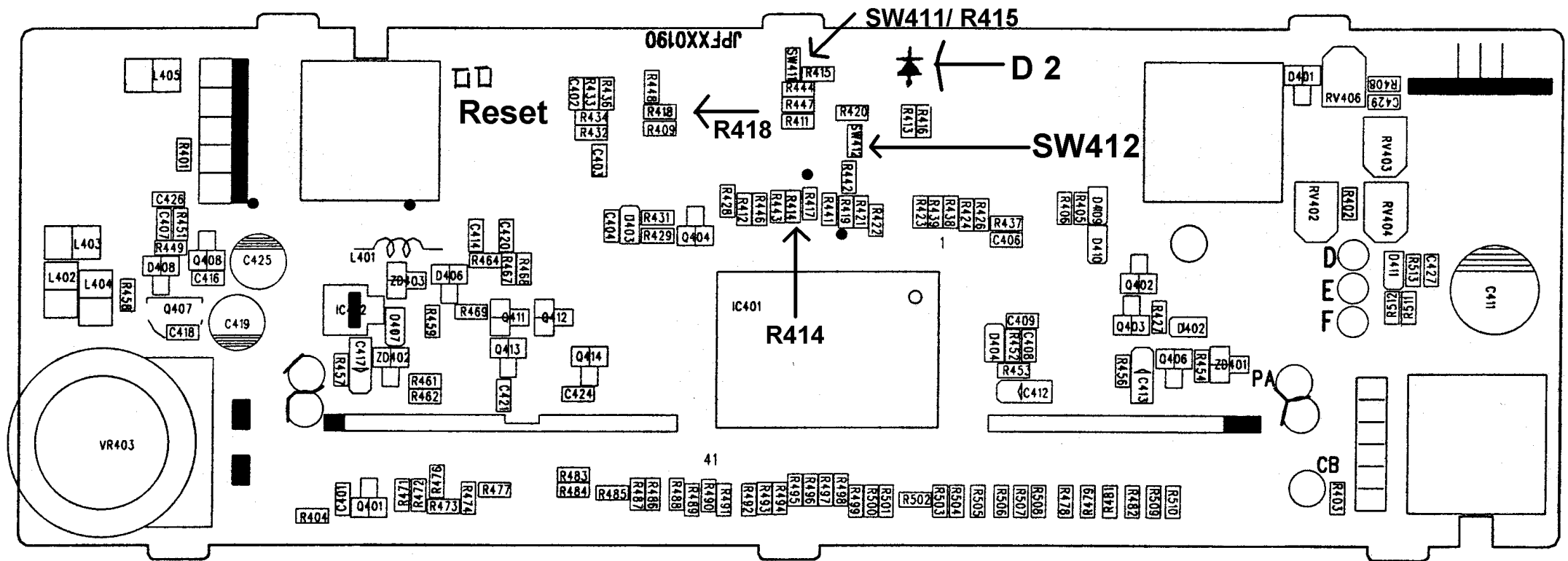
### NOTE CB BAND MODE

PRESS "FUNC" BUTTON SIMPLAY AND THEN PRESS CALL FOR LESS THAN 1SEC TO CONVERT TO FREQUENCY READ OUT OR CHNNEL READ OUT.

### 6. "CALL" BUTTON

HAM BAND MODE : CALL BUTTON.

CB BAND (454CH) MODE : BAND SWITCH (BAND NUMBER A – J)





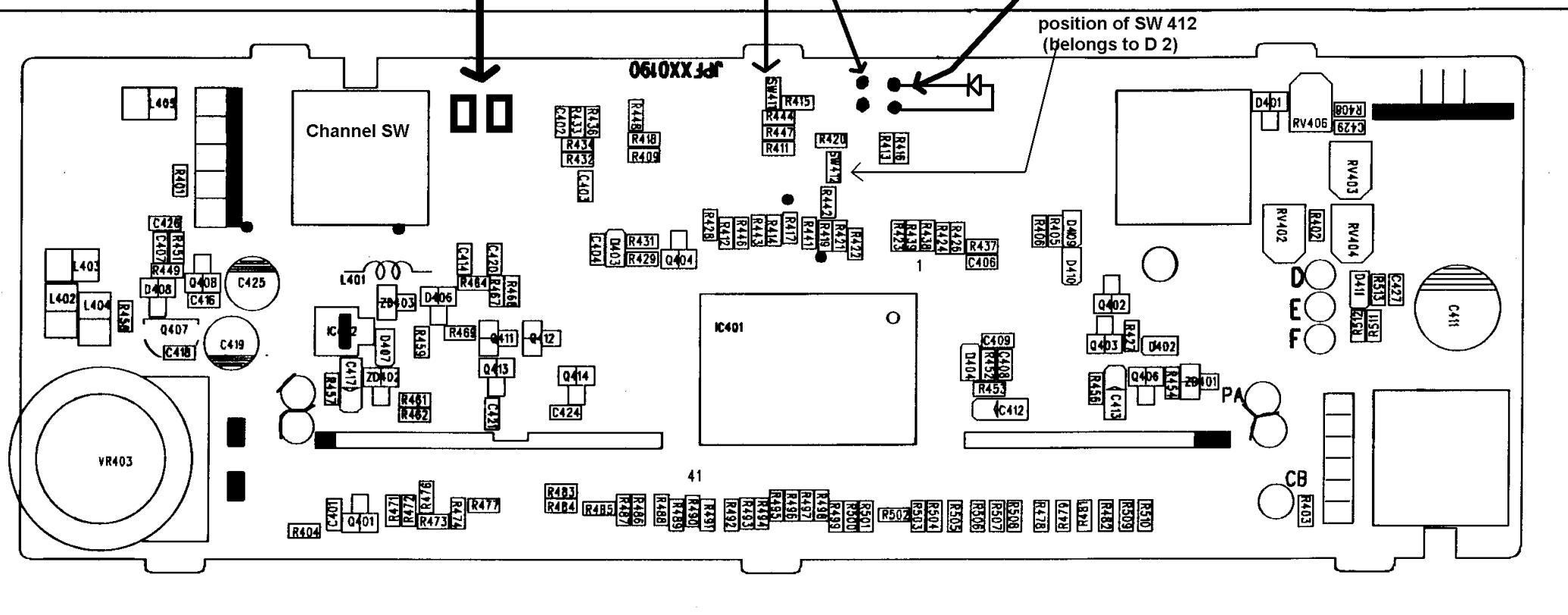
# **AE 485 S** **Jumpers and** **Programming Points**

Reset  
Contact Fields

Position for D 1 and  
SW 411 (countries with  
CB-Band only)

Position of D 2 (Germany and countries  
where extension allowed)  
(factory installed)

position of SW 412  
(belongs to D 2)





# TEST DATA

TEST CHANNEL : 20 CH

ANT. IMPEDANCE : 50 ohms

SP. IMPEDANCE : 8 ohms

POWER SUPPLY : DC 13.8V

## TRANSMITTER SECTION

			UNIT	LIMIT	# 1
1.	RF OUT PUT POWER	PEP FM	W	3.6-4.4	3.9
		AM	W	0.8-1.2	1
		PEP USB	W	3.6-4.4	3.9
		PEP LSB	W	3.6-4.4	3.9
2.	FREQUENCY TOLERANCE	FM	Hz	$\pm 400>$	+150
		AM	Hz	$\pm 400>$	+150
		USB	Hz	$\pm 400>$	-30
		LSB	Hz	$\pm 400>$	-20
3.	MIC. SENS. 1KHz DEV 50% MOD 1W PEP OUTPUT 1W PEP OUTPUT	FM	mV	6>	5.0
		AM	mV	6>	1.0
		USB	mV	6>	1.5
		LSB	mV	6>	1.5
4.	MODULATION CAPABILIRY	FM	KHz	$2 \pm 0.2$	2.0
		AM	%	85~95	95
5.	MOD FREQUENCY REPOSPOSE LOWER AT 450Hz EIA UPPER AT 2500Hz EIA	FM	dB	$-6 \pm 6>$	-10
			dB	$-6 \pm 6>$	-1
		AM	dB	$-6 \pm 6>$	-4
			dB	$-6 \pm 6>$	-1
6.	CARRIER SUPPRESSION	USB		38	50
		LSB	dB	38	40
7.	CURRENT DRAIN NO MO D 80% MOD MAX PEP SINGLE TONE	FM	A	3.5>	2.9
		AM	A	3.5>	1.7
		AM	A	3.5>	1.7
		USB	A	3.5>	2.7
		LSB	A	3.5>	2.7

# TEST DATA

TEST CHANNEL : 20 CH

ANT. IMPEDANCE : 50 ohms

SP. IMPEDANCE : 8 ohms

POWER SUPPLY : DC 13.8V

## RECEIVER SECTION

		UNIT	LIMIT	# 1
1.	SENS FOR 10dB S/N FM	dBuV	-6>	-10
	AM	dBuV	0>	-2
	USB	dBuV	-6>	-16
	LSB	dBuV	-6>	-16
2.	SQUELCH SENS. AT THRESHOLD AM	dBuV	0>	-11
3.	SQUELCH SENS. AT THIGHT AM	dBuV	50~70	64
	SSB	dBuV	50~70	
4.	AGC FIGURE OF MERIT 50mV AM	dB	70<	90
5.	OVERALL AUDIO FIDELITY AT 6dB DOWN			
	UPPER FREQUENCY AM/FM	KHz	1.5~3	2.2/2.2
	LOWER FREQUENCY AM/FM	KHz	0.3~0.6	0.38/0.40
6.	CLARIFIER	KHz	±0.8<	+1.3~-1.0
7.	MAXIMUM AUDIO OUTPUT POWER FM	W	2<	3.6
	AM	W	2<	3.0
	USB	W	2<	4.0
	LSB	W	2<	4.0
8.	OUTPUT POWER AT 10PCT THD FM	W	1<	2.6
	AM	W	1<	2.6
	USB	W	1<	2.6
	LSB	W	1<	2.6
9.	DISTORTION AT 1mV FM	%	10>	6.0
	AM	%	10>	1.8
	USB	%	10>	1.0
	LSB	%	10>	1.2
10.	S/N RATIO AT 1mV FM	dB	34<	49
	AM	dB	34<	54
	USB	dB	34<	36
	LSB	dB	34<	44
11.	IF REJECTION RATIO FM	dB	60<	99
	AM	dB	60<	99
	USB	dB	60<	99
	LSB	dB	60<	99
12.	S-9 SENSITIVITY	dB	30-50	33
13.	RF GAIN CONTROL AT S+N/N 10dB	dB	30-60	50
14.	CURRENT DRAIN NO SIGNAL	mA	500>	300
	MAX SIGNAL	mA	1000>	600